

Application No. 10/765,253
Amendment dated February 28, 2006
Reply to Office Action of October 31, 2005

Amendments to the Drawings:

The attached sheets of drawings includes changes to Figs. 9 and 11. These sheets, which include Figs. 1-14, replace the original sheets including Figs. 1-14.

Attachment: Replacement Sheets
Annotated Sheets

REMARKS/ARGUMENTS

Claims 1-50 are pending in the application.

Paragraphs [0001] and [0053] of the specification have been amended to indicate that Application Serial No. 09/964,487 has issued as U.S. Patent No. 6,710,711.

Paragraph [0037] of the specification has been amended to include the phrase "sensors at" as suggested by the Examiner.

Fig. 9 has been amended to replace "Axis's" with -- Axes --.

Fig. 11 has been amended to replace "1, 2, 3, 4 & 5" with "C₁, C₂, C₃ & C₄".

Claim 22 has been amended to replace "sensor comprises" with -- sensors comprise -- in response to the objection under 37 CFR 1.75(a).

Claims 1-17, 24, 27, 47, 49 and 50 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Claims 1 and 49 have been amended to replace the word "sensor" with the word "sensors".

Claims 23 and 24 have been amended to more clearly recite that the contaminant sensors are remotely positioned.

Claim 27 has been amended to more clearly recite that the contaminant sensors sample air, ground water, surface water, sediment and/or soil.

Claim 47 has been amended to more clearly recite that the method further comprises the step of communicating the detected contaminant release via an information technology infrastructure prior to the response to the contaminant release.

Claims 1, 2, 4, 5, 8, 13, 15-19, 24, 29, 30, 32, 34-37, 40 and 47-50 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Gelbard '640. According to the Office Action, Gelbard '640 discloses a building having rooms (as shown in Fig. 2), at least some of the rooms having a "contaminant sensor" therein. Airborne contaminant concentrations in rooms which lack such a sensor are inferred (or predicted) based on data collected by contaminant sensors in rooms which have such a sensor; the measured and predicted contaminant sensor concentrations are used to "identify a near-optimal distribution of sensors within the building", when the number of available sensors is less than the total number of rooms; and the data can be used to "predict one or more

contaminant initial release points”. According to the Office Action, the predicting of contaminant initial release points corresponds to “identifying at least one potential contaminant release location”, as recited in Claims 1, 34, 48 and 49. Regarding Claim 18, the Office Action states that Gelbard ‘640 teaches “collecting detection data” from the sensors; it is further implied that the collected data is used for “identifying the occurrence of unsafe contaminant levels”, where an “unsafe level” may simply be the presence of any amount of detected contaminant. Applicant respectfully traverses these rejections.

Independent Claims 1, 18, 35 and 49 have been amended to more clearly recite that the contaminant sensors are positioned in an outdoor area, and contaminant release is detected in that outdoor area. Thus, the claims have been amended to clarify that contaminants in an outdoor environment are detected as opposed to a closed building. Basis for the amended claim language is provided in the specification, for example, at pages 10 and 11 paragraphs [0049] and [0050], and Figs. 14-18.

Gelbard ‘640 does not teach or suggest such position of contaminant sensors in an outdoor area or the detection of a contaminant release in an outdoor area. Instead, Gelbard ‘640 discloses a system for inferring airborne contaminant concentrations in rooms without contaminant sensors based on data collected by contaminant sensors in other rooms of a building. Airflow interconnectivity data within the building is used to determine contaminant concentrations in other rooms in the building. Thus, Gelbard ‘640 discloses a closed system which relies upon interconnectivity data between rooms of a building. The use of sensors positioned in an outdoor area to detect a contaminant release in that outdoor area is not taught or suggested by Gelbard ‘640. It is therefore submitted that independent Claims 1, 18, 35 and 49, and the claims that depend therefrom, are patentable over Gelbard ‘640.

Claims 18, 20-22, 35, 36, 38 and 39 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Dungan ‘887, or in the alternative under 35 U.S.C. § 102(b) as allegedly being anticipated by Fasano ‘964. According to the Office Action, each of Dungan ‘887 and Fasano ‘964 teach detecting a contaminant release by collecting detection data from selectively placed contaminant sensors, and identifying the occurrence of unsafe contaminant levels so as to respond to the contaminant release, wherein the

detection data includes weather conditions such as wind speed and/or wind direction. It is submitted that independent Claims 18 and 35, and the claims that depend therefrom, are patentable over both Dungan '887 and Fasano '964.

Independent Claims 18 and 35 have been amended to include the step of selectively positioning contaminant sensors within the outdoor area based on a modeled contaminant dispersion pattern in the outdoor area. Basis for this language is provided in the specification, for example, at page 10, paragraph [0049], and original Claims 1 and 49.

Neither Dungan '887 nor Fasano '964 teach or suggest the selective positioning of contaminant sensors based on a modeled contaminant dispersion pattern as recited in Claims 18 and 35. Dungan '887 discloses a wireless gas monitoring system. Fasano '964 discloses a fenceline monitoring system for airborne hazardous materials. Since Dungan '887 and Fasano '964 fail to teach or suggest the combinations of features recited in Claims 18 and 35, it is submitted that the claims are patentable thereover.

Claims 6, 7, 9-12, 14 and 22 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gelbard '640. For the reasons noted above in connection with independent Claims 1 and 18, dependent Claims 6, 7, 9-1, 14 and 22 are similarly patentable over Gelbard '640.

Claims 25-28, 31, 33, 41 and 46 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over any of Gelbard '640, Dungan '887 and Fasano '964. These claims are patentable over the applied references for the same reasons as noted above in connection with independent Claims 18 and 35, from which these claims depend.

Claims 42 and 43 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gelbard '640 in further view of Reeser '970. Reeser '970 fails to remedy the above-noted deficiencies of Gelbard '640 in connection with independent Claim 35. Accordingly, dependent Claims 42 and 43 are likewise patentable over the prior art.

Claim 44 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gelbard '640 in view of Berry '861. Claim 44 is patentable over Gelbard '640 and Berry '861 for the same reasons noted above in connection with independent Claim 35.

Claim 45 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Gelbard '640 and further in view of Wicks et al. '565. Claim 45 is patentable over the applied references for the same reasons as noted above in connection with independent Claim 35.

In view of the foregoing amendments and remarks, it is submitted that Claims 1-50 are patentable over the prior art of record and the application is in condition for allowance. Accordingly, an early Notice of Allowance of this application is respectfully requested.

In the event that any outstanding matters remain in connection with this application, the Examiner is invited to telephone the undersigned at (412) 263-4340 to discuss such matters.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Alan G. Towner', is written over the typed name.

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